

XXXIV.—*On the Cistelidæ and other Heteromerous Species of Japan.* By G. LEWIS, F.L.S.

[Plate VIII.]

THIS paper is written to follow that of the Tenebrionidæ, published in the Ann. & Mag. Nat. Hist. ser. 6, vol. xiii. pp. 377–400, and 465–485, 1894; and in some notes given here at the end of the CEdemeridæ will be found some references to the synonymy which is necessary to bring the paper of last year up to date. Of the families now treated of, Marseul in 1876 enumerated nearly fifty species, and about forty more have been described by other authors, including myself, and these, with the additions recorded here, bring the entire number to about 175. The Pyrochroidæ have been chiefly dealt with separately in a paper in the Ann. & Mag. Nat. Hist. ser. 5, vol. xx. pp. 167–174, 1887, and the Mordellidæ, Rhipiphoridæ, Meloidæ, and Cantharidæ remain to be worked out before the Heteromerous series is complete so far as my Japanese collection is concerned.

The collections in the National Museum of the later families in the Heteromera have not been of material use to me; they are not so rich in named specimens as in the Tenebrionidæ, but I am again much indebted to Mr. G. C. Champion for both the loan of typical specimens and for a continuance of the kindly assistance given to me last year. It will be noticed also from the number of genera I have been obliged to establish that this section of the Heteromera has been less studied, owing partly no doubt to the greater paucity of material in collections than in the genera of the earlier series, and this too after using, as other authors have done, names sunk in the Munich Catalogue as synonymic.

In the list of species at the end of this paper a reference is again given to the year of the 'Zoological Record' in which some isolated descriptions may be found. This only applies to species to which the full reference is not given here or in Marseul's memoir of 1876 or the Munich Catalogue of 1869.

Allecula cryptomerie, sp. n.

Elongata, opaca, nigra; antennis, palpis pedibusque rufis vel obscure brunneis; thorace leviter punctulato; elytris punctato-striatis, interstitiis impunctatis convexis.

L. 16–17½ mill.

Elongate, rather parallel at the sides, black, opaque; the head sparingly and unevenly punctured; the thorax obscurely punctulate, with a faint median channel, nearly as long as broad, bisinuous at base; the scutellum almost

smooth; the elytra deeply punctate-striate, interstices impunctate and convex; antennæ, mouth-organs, tibiæ and tarsi reddish brown, thighs darker.

This fine species is longer and much more parallel in form than *A. fuliginosa*, Mäklin; the thorax much less transverse and the punctures in it are so fine and sparse that in certain lights it appears smooth.

Hab. Chiuzenji, Nikko, and Mayebashi. Apparently local; found running at night on large decaying trunks of *Cryptomeria japonica*.

Allecula fuliginosa, Mäklin.

Allecula fuliginosa, Mäkl. Act. Fenn. x. p. 566 (1875).

Allecula obscura, Har. Abh. Ver. Brem. v. p. 132 (1876).

Allecula velutina, Mars. Ann. Soc. Ent. Fr. vi. p. 322 (1876).

Hab. Nagasaki, Kioto, and other places; very abundant.

Allecula melanaria, Mäklin.

Allecula melanaria, Mäkl. Act. Fenn. x. p. 569 (1875).

Allecula rufipes, Mars. 1876, nec *rufipes*, Fabr. 1801.

Hab. Yokohama and Nagasaki; taken very commonly at both places.

Allecula noctivaga, sp. n.

Elongata, brunneo-nigra, opaca, griseo-pubescent; capite thoraceque densissime punctulatis; elytris punctato-striatis, interstitiis dense et minute punctatis, marginibus externis anguste rufis.

L. $6\frac{1}{4}$ – $6\frac{1}{2}$ mill.

Elongate, brownish black, opaque; the head densely and evenly punctulate; the thorax even more densely punctulate and opaque, somewhat quadrate, nearly as broad before as behind; the scutellum reddish brown, punctulate; the elytra more than three times the length of the head and thorax, parallel for two thirds the length, then gradually narrowing to the apices, outer margin dull red, striæ deep and punctate (especially the fourth), interstices densely and minutely punctured; the antennæ and legs reddish brown, thighs darker before their apices.

Hab. Kashiwagi. Two examples, 22nd June, 1881.

Allecula simiola, sp. n.

Parum elongata, rufo-brunnea, subnitida; capite thoraceque dense punctatis; elytris marginibus internis et externis rufis.

L. $6\frac{3}{4}$ – $7\frac{1}{2}$ mill.

Rather elongate, reddish brown, somewhat shining, clothed

with tawny pubescence; the head rather densely punctured and relatively wide between the eyes; the thorax wider than long, widest posteriorly, hind angles obtuse, punctured somewhat similarly to the head, but a little more densely before the scutellum, median impression faint; the scutellum reddish, punctulate; the elytra not parallel laterally, but widest behind the posterior coxæ, punctate-striate, interstices obscurely punctulate, narrowly red on the sutural and outer edges, dorsal region darkest; the antennæ, mouth-organs, and legs wholly reddish brown.

Larger, with a wider head and thicker antennæ, but otherwise very similar to *A. tenuis*, Mars., 1876 (nec *tenuis*, Fairm., 1894).

Hab. Kashiwagi and Nikko; one example at each place.

Allecula æneipennis, Harold.

Allecula æneipennis, Har. Deutsche ent. Zeitschr. p. 80 (1878).

Distinguished from all in this series by the green or blue colouring of the elytra.

Hab. Fukushima, Kashiwagi, Nikkô, and Chiuzenji. An abundant species where it occurs. Tokio, the locality given by Harold, is probably an error, as I found it only at intermediate and high elevations.

Hymenorus veterator, sp. n.

Elongatus, brunneo-niger, pubescens, parum nitidus; capite thoraceque distincte punctatis; elytris punctato-striatis, apicalibus vage rufis; antennis pedibusque rufis.

L. $6\frac{1}{2}$ mill.

Elongate, brown-black, with tawny pubescence, somewhat shining; the head rather closely punctured; the thorax transverse, widest before the base, arched anteriorly, punctured like the head, bisinuous at the base, distinctly impressed before the scutellum; the elytra rather long, not quite parallel at the sides, punctate-striate, interstices obscurely punctulate and transversely rugose, apices vaguely reddish; the antennæ and legs clear red.

Hab. Nikko and Maiyasan near Kobé. Three examples only, taken in August.

Cistela Haagi.

Pseudocistela Haagi, Har. Deutsche ent. Zeitschr. p. 80 (1878).

Harold only knew the female; the male has strongly pectinate antennæ, and the thorax is, in all my specimens, red at and within the posterior angles only. I have one female with the thorax entirely black.

Hab. Nikko, Miyanoshta, and Kashiwagi, in June. In Nagasaki as early as March.

Mycetochares collina, sp. n.

Picea, nigro-pubescons, nitida; elytris 4-maculatis, maculis rufis; pedibus rufis.

L. $4\frac{1}{2}$ - $5\frac{1}{4}$ mill.

Piceous, clothed with black pubescence; the head rather wide, width especially noticeable between the eyes, irregularly and rather finely punctured; the thorax widest near the middle and rounded off to the anterior angles, posteriorly rectangular, punctured like the head, basal foveæ well-marked, with a rather wide antescutellar depression; the scutellum triangular and distinctly punctured; the elytra parallel at the sides, with a lobe-shaped red spot behind the humeral angle and a second transverse spot well before the apex and placed midway between the outer and sutural edges, punctate-striate, striæ not well-defined, owing to the punctuation, interstices vaguely rugose and punctulate; the antennæ red, with joints 6 to 10 usually infusate; the legs clear red.

Hab. Kashiwagi.

Mycetochares mimica, sp. n.

Nigro-brunnea, griseo-pubescons, nitida; elytris basi bimaculatis; pedibus brunneis.

L. $4\frac{1}{2}$ -5 mill.

Blackish brown, with greyish pubescence; the head narrower than that of *M. collina*, irregularly and rather coarsely punctured; the thorax narrowest anteriorly, punctured like the head, basal fovea not well defined; the scutellum triangular, punctured irregularly; the elytra not parallel at the sides, widest near the middle, sometimes with a small humeral red spot; the antennæ and legs reddish brown.

Resembles *M. linearis*, Ill., a European species.

Hab. Hitoyoshi, Wada-togé, Sapporo and Junsai.

Mycetochares scutellaris, sp. n.

Brunnea, nigro-pubescons, nitida; capite elytris infuscatis; thorace obscure brunneo; scutello rufo; antennis pedibusque rufotestaceis.

L. $4\frac{1}{4}$ - $4\frac{1}{2}$ mill.

Somewhat elongate, narrower than either of the last two species, reddish brown, shining; the head somewhat narrow, punctulate, nearly black between the eyes, anterior part and mouth-organs testaceous; the thorax rather finely punctured, brownish, darkest on the disk; the scutellum reddish brown

or bright red; the elytra darker in colour than the thorax, sometimes immaculate, usually with a humeral flavous spot and a second transverse one before the apex, rather parallel at the sides, punctate-striate; the antennæ and legs reddish brown, the antennæ being rather the darkest.

Hab. Konosé. A series taken, 17th May, 1881.

Pytho nivalis, Lewis.

Pytho nivalis, Lew. Ent. xxi. p. 220 (1888).

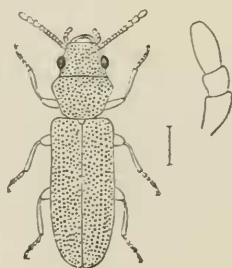
This is the only species at present known from Japan.

Hab. Niohosan, and on the highest altitudes above Nikko, in places where the snow remains in shady spots until the beginning of June.

ISTRISIA, gen. nov.

This genus has most of the characteristics of *Salpingus*. The chief differences are: ten joints of the antennæ moniliform, basal joint nearly as large again as the second; 2-7 almost similar, 8-9 thicker and larger than the basal joint, terminal largest and conical; maxillary palpi, 2 basal joints short, third moniliform, terminal longer but not wider; the legs and tarsi are formed like those in *Salpingus*. The thorax is gradually narrowed at the sides from behind the anterior angle; the elytra not striate. Having only one example, I give an outline of the body, and an enlarged drawing of the palpi (fig. 1).

Fig. 1.



Istrisia rufobrunnea, sp. n.

Elongata, subdepressa, parallela, brunnea, punctata, nitida; thorace basi angustiore; elytris punctatis, haud striatis; antennis pedibusque concoloribus.

L. 5 mill.

Elongate, parallel, very slightly convex, brown, shining; the head rather wide, carinate at the sides from the anterior

part past the antennæ to the eyes, sparsely punctate, triangularly impressed between the antennæ, sides parallel, with the eyes abruptly prominent; the thorax, punctured like the head, widest just behind the anterior margin, then gradually lessening in width to the base, where it is narrower than behind the neck; the scutellum smooth; the elytra punctate, punctures at times vaguely arranged in longitudinal lines; the legs and antennæ palish brown, somewhat lighter in colour than the body.

Hab. Sapporo.

Salpingus niponicus, sp. n.

Nigrescens, nitidus; capite thoraceque punctatis; elytris nigro-brunneis; antennis articulis 1^o-8^m rufis, 9^o-11^m nigris.

L. 2 $\frac{3}{4}$ -3 $\frac{1}{4}$ mill.

Blackish, shining; the head very clearly punctate, punctures rather closely set, eyes prominent; the thorax, punctate like the head, arched at the sides before the narrowed base, usually with a fovea on the middle of the anterior edge; the elytra striate-punctate, interstices smooth, brown, dark brown, or nearly black with humeral angle brown; the antennæ, eight basal joints reddish brown, three apical black; the legs dull brown, tarsi paler.

I did not obtain a species of *Rhinosimus*, but the genus probably occurs in the north.

Hab. Nikko, Chiuzenji, Nishimura, and Junsai.

Lissodema ainunum, sp. n.

Robustum, picco-nigrum, nitidum; elytris pallido testaceis, basi et medio dorsi infuscatis; antennis parum brevibus.

L. 3 $\frac{1}{2}$ mill.

Rather robust, pitchy black, shining; the head somewhat wide and rather roughly punctate, mouth-organs reddish brown; the thorax 4-denticulate laterally and closely punctate, with two basal foveæ; the elytra striate-punctate, pale testaceous, with two lobe-shaped patches at the base and a band across the middle of the dorsum (the band widens out in the sutural area) infuscate; the antennæ and legs reddish brown, the former being shorter and stouter than those of any other of this series.

Hab. Junsai. Two examples only.

Lissodema plagiatum, sp. n.

Longiusculum, nigrum, nitidum; capite thoraceque dense punctatis; elytris macula subhumerali flavo-testacea; tibiis tarsisque pallide brunneis.

L. 2 $\frac{3}{4}$ mill.

Black, shining; the head a little prolonged before the eyes, with two lateral impressions near the bases of the antennæ, mouth-organs palish; the thorax 4-dentate, narrowed at the base behind the posterior denticulation, densely punctured, with one very distinct fovea on each side near the base; the elytra punctate-striate at the base, the striæ gradually becoming punctiform after the middle, behind the humeral angle and extending across the wing-case nearly to the sutural stria is a pale yellowish spot, more or less defined and in one specimen almost absent; the antennæ, joints 1-8 reddish brown, 9-10 black, terminal reddish at the apex only; the legs, thighs infuscate, tibiæ and tarsi pale brown.

This is the most elongate species of this series.

Hab. Junsai. Four or five examples.

Lissodema pictipenne, sp. n.

Breve, nigrum, nitidum; capite parum sparse, thorace dense punctatis; elytris distincte 4-maculatis, maculis flavis; tibiis tarsisque pallide brunneis.

L. $2\frac{3}{4}$ mill.

Black, shining, body somewhat short; the head punctured, punctures clear but not set closely; the thorax, 4-denticulate laterally, little narrowed at the base, with two shallow foveæ; the elytra widest at the middle, punctate-striate, punctures not evanescent at or before the apices, with a transverse, somewhat broad, flavous spot before the base, which reaches from the sutural stria outwards nearly to the edge, and there is a second somewhat oval spot on each wing-case before the apex; the legs, thighs darkish, tibiæ and tarsi pale brown; the antennæ, joints 1-8 obscurely brown, 9-11 somewhat large, infuscate, with the apex of the last reddish.

The somewhat enlarged apical joints of the antennæ distinguish this species from others of the series, except *L. validicorne*.

Hab. Chiuzenji. One example, August 23rd, 1881.

Lissodema lævipenne, Mars.

This species was found originally at Nagasaki, but I met with it afterwards in various places as far north as the plain of Fujisan.

Lissodema japonum, Reitter.

Lissodema japonum, Reitt. Deutsche ent. Zeitschr. p. 382 (1877).

“Oblongum, leviter convexum, nitidum, piceo-brunneum, haud metallo-æneum, ore, antennis pedibusque rufo-testaceis; pro-

thorace transverso, confertissime fortiter punctato, ante basin utrinque oblique foveolato, lateribus rotundato, quinque denticulato, basin versus magis attenuato; scutello lævi, clytris thorace paullo latioribus et triplo longioribus, lateribus late rotundatis, supra fortiter seriatim punctatis, interstitiis levibus."

L. 2·5 mill.

Hab. "Japan." I am much indebted to Herr E. Reitter for an example of this species. I did not meet with it, but I believe it was taken by Herr Hiller at Uagi, north-east of Shimonoseki.

Lissolema beatulum, sp. n.

Parum breve, rufo-brunneum, nitidum; clytris tenuiter striato-punctatis: antennis pedibusque concoloribus.

L. $2\frac{3}{4}$ mill.

Somewhat short, reddish brown, shining; the head bi-impressed between the antennæ, clearly and rather closely punctured; the thorax arched at the sides, from the anterior angle to the base, punctured like the head, with two basal foveæ; the elytra are a little paler in colour than the thorax, especially at the humeral angles, punctures which constitute the striæ are irregular, largest near the bases, and becoming gradually finer towards the apices, interstices flat; the antennæ, joints 9-10 and the terminal, except at the apex, infuscate, the others with the legs reddish brown.

Hab. Oiyayama and Nishimura in June. Two examples.

Lissodema dentatum, sp. n.

Brunneo-nigrum, nitidum; capite parum dense, thorace dense punctatis, hoc lateribus distincte denticulato; clytris unicoloribus, punctato-striatis; antennis basi pedibusque obscure rufis.

L. $2\frac{3}{4}$ -3 mill.

Brownish black, shining; the head clearly but not thickly punctured, with a small, not always very distinct, fovea between the eyes; the thorax more closely punctured than the head, 4-foveolate, with the lateral denticulations somewhat acute and well defined; the elytra concolorous, punctate-striate, with the rows of punctures along the suture more or less broken; the antennæ, basal joints red, 9-11 infuscate; the legs wholly dull red.

Hab. Fukushima and Junsai. A series of specimens from both places.

The two following species have one lateral thoracic tooth very prominent:—

Lissodema validicorne, sp. n.

Parum breve, brunneo-nigrum, nitidum; capite utrinque carinato; thorace subæneo, dense et parum profunde punctato, in medio valde dentato; elytris punctato-striatis; antennis articulis 1^o-6^m flavis, 7^o-11^m infuscatis; tibiis tarsisque brunneis.

L. 2 mill.

This species is rather larger than *L. tomaroides*, and like it has one very prominent tooth on the middle of the lateral edge; but the chief difference is in the antennæ, the four apical joints are nearly black, and the 3-jointed club much more robust.

Hab. Oyayama, June 1st, 1881. One specimen.

Lissodema tomaroides, sp. n.

Breve, brunneo-nigrum, nitidum; capite sparse punctato, utrinque carinato; thorace lateribus in medio valde dentato; elytris in medio latoribus; antennis pedibusque brunneis.

L. $1\frac{3}{4}$ -2 mill.

Rather short, brownish black, shining; the head carinate on either side over the eyes and as far as the antennæ, not closely punctured, especially between the eyes; the thorax closely and more coarsely punctured than the head, the second lateral denticulation from the base is at the middle of the thoracic margin and is very prominent, two anterior teeth obsolete; the elytra widest in the middle, rather browner than the thorax, punctate-striate; the antennæ are slender and relatively shorter than others of this series, and are with the legs pale brown.

Resembles a species of *Corticaria* or *Tomarus*.

Hab. Miyanoshita. Found rather commonly.

Lissodema minutum, sp. n.

Breve, brunneo-nigrum, nitidum; capite utrinque carinato, sparse punctulato; thorace transverso, dense punctato; elytris late ovatis, punctato-striatis; antennis basi pedibusque pallide brunneis.

L. $1\frac{3}{4}$ mill.

This minute species is remarkable in having the thorax distinctly transverse and the elytra broadly oval. The elytra are much broader than the thorax.

Hab. Oyayama. One example, June 1st, 1881.

Eustrophus niponicus, sp. n.

This species is extremely like *E. dermestoides*, Fabr. It differs structurally in being a little narrower in body, thoracic posterior angles much less overlapping, thorax more rounded off behind the eye; scutellum one-fourth smaller; hind tibiæ less stout, with the tarsi longer and less robust. In sculpture the punctuation is less marked, and the carina along the base of thorax much less conspicuous. The pubescence also is more tawny.

Hab. Sapporo. Two examples only.

Holostrophus orientalis, sp. n.

Oblongo-ovalis, rufo-brunneus, pubescens; elytris bifasciatis, disco rufo-bimaculato, apicibus obscure rufis; antennis pedibusque rufo-brunneis.

L. 6-6 $\frac{3}{4}$ mill.

Oblong oval, rather densely clothed with short pubescence; the head wholly red; the thorax, disk, and base more or less widely infusate, anterior and lateral edge reddish, rather densely punctulate; the elytra black, with a fascia at the base reddish brown, the fascia leaves two round dusky spots on the basal edge, one near the humeral angle, the other midway between it and the suture, posteriorly the fascia is bidentate, the inner dentation being the strongest, on the middle of the dorsum on each side of the suture is a reddish spot irregular in outline, and behind it on the outer elytral edge and extending two-thirds across the wing-case, is a second fascia, the apices of the elytra are also somewhat reddish brown; the antennæ and legs reddish brown, with the thicker joints of the former somewhat dusky. In one example the dusky spots at the base of the elytra join.

Hab. Hitoyoshi on Rakuwayama in May, and at Niigata in September.

Holostrophus dux, sp. n.

H. quadrimaculato simillimus, at multo major et latior; capite rufo; thorace nigro; elytris 4-maculatis; subtus rufo-brunneus. L. 6 $\frac{3}{4}$ mill.

This fine species in colour and elytral markings is extremely like *H. 4-maculatus*, but it is very much larger and the legs and tarsi are much more robust. The head is red; the thorax black above; the elytra with four red spots, the red spot below the shoulder is narrower and more transverse than that of *4-maculatus*, and it leaves a much wider margin of black on the outer edge, and the anterior edge of the maculation is

obtusely dentate in the middle ; the second spot is also relatively narrower and more transverse, and it leaves a wide margin both at the suture and on the outer margin, and it is also further from the apex of the wing-case. Body beneath reddish brown.

Hab. Yuyama.

Holostrophus 4-maculatus, sp. n.

Oblongo-ovatus, subtus rufo-brunneus ; elytris 4-maculatis, maculis rufis, macula posteriore transversa ; antennis pedibusque rufo-brunneis.

L. $3\frac{1}{2}$ –4 mill.

Oblong oval, clothed with short pubescence ; the head piceous or reddish brown ; the thorax black, punctulate, sometimes with an obscure reddish spot on the middle of the lateral margin ; the elytra black, with a red lobe-shaped spot before the base, which nearly touches the epipleuræ, but on the sutural side leaves a wide interstice, before the apex is a second red spot, transverse in form, sometimes it touches the epipleuræ, and sometimes it is interrupted at the suture, but not usually ; the antennæ and legs clear reddish brown.

The punctuation of the thorax is more clearly defined than in that of *H. orientalis*.

Hab. Miyanoshita, Fujisan Plain, and Nikko.

Holostrophus unicolor, sp. n.

Oblongo-ovalis, punctulatus, obscure niger, subtus brunneo-niger ; elytris immaculatis ; antennis pedibusque dilutioribus.

L. 4 mill.

This species is smaller and narrower than *H. 4-maculatus*, with the upper surface concolorous ; the antennæ, palpi, tibiæ, and tarsi reddish brown, with thighs darker. The surface-sculpture in this and the three preceding species is very similar, and the characters suitable for specific distinctions relate chiefly to colour.

I am indebted to Dr. Horn, the author of the genus *Holostrophus*, for indicating, when on a visit here, that my Eastern captures belong to his genus.

Hab. Yuyama in Higo. Three specimens in May.

Orchesia elegantula, sp. n.

Elliptica, fusco-brunnea, pubescens ; elytris rufo-brunneis, nigro-fasciatis ; antennis pedibusque rufo-brunneis.

L. 5 mill.

Elliptical, dusky brown, pubescent, densely and minutely

sculptured above; the head reddish brown; the thorax reddish brown behind the head, the rest infusate, less pubescent on the reddish part than behind, thoracic foveæ shallow and somewhat triangular; the elytra, margins of the suture infusate, and at the base of the wing-case, and sometimes touching the basal edge, is a dark longitudinal blotch which joins the sutural marking and at about half its length it spreads out towards the lateral edge, over the second segment of the abdomen is a dark undulating fascia which extends quite across the elytra, at the apex is a third dark marking which leaves a very narrow reddish margin on the outer edge; the antennæ and legs reddish brown, with 7-10 joints of the first generally dusky. This species and the next agree with *O. undulata*, Kraatz, in having the last four antennal joints enlarged and forming a club.

The elytral markings of this and *O. imitans* differ from *O. undulata*, Kraatz; otherwise they are not very dissimilar.

Hab. Junsai. Several specimens.

Orchesia imitans, sp. n.

Elliptica, rufo-brunnea, pubescens; elytris trifasciatis, lateralibus in medio nigro-maculatis; antennis pedibusque brunneo-rufis.
L. 4-4½ mill.

Elliptical, reddish brown, densely sculptured, pubescent; the head and thorax unicolorous; thoracic fovea wide and shallow; the elytra, margins of the suture infusate, at the base is a somewhat similar marking to that of *O. elegantula*, but less defined in outline, the middle fascia is broader and in front of it near the lateral edge is a detached dark spot, the apical marking is rather broader and the margin less distinctly red; the antennæ and legs reddish brown, with 7-10 joints of the first dusky.

Smaller than *O. elegantula*, with the thorax usually wholly reddish brown. The detached spot near the middle of the elytral margin is also a conspicuous specific character.

Hab. Ichiuchi, Miyanoshita, and other places; not uncommon in South and Central Japan.

Orchesia ocellaris, sp. n.

Elliptica, pallide rufo-brunnea; thorace obscure brunneo vel infusato; antennis pedibusque concoloribus.
L. 5¼-5½ mill.

Elliptical, rather pale reddish brown; the eyes coarsely granulate, very large, in male nearly meeting above, female with the space between the eyes much wider; the thorax

faintly dusky, especially on the disk, with the fore part reddish, sculpture very clear and rather larger than that of the head; the elytra clear reddish brown, without fasciæ; the antennæ and legs testaceous; the eighth joint of the antennæ is not longer than the seventh, the three terminal joints form a club, which is much stouter than that of *O. Marseuli*.

Hab. Kashiwagi, in June.

Orchesia Marseuli, sp. n.

Orchesia micans, Panz.; Mars. Ann. Soc. Ent. Fr. p. 333 (1876).

This species differs structurally from *O. micans* in being larger and much more elongate, the thorax less broad at the base, and the basal joint of the hind tarsus is more than one-third longer. Marseul's determination rested on indifferent specimens.

Hab. Kashiwagi, Fukushima, Chiuzenji, and Junsai.

Microscapha japonica, Reitter.

Lederia japonica, Reit. Deutsche ent. Zeitschr. p. 30 (1891).

Hab. Kashiwagi and Nagasaki. Rather common in haystack-refuse at the latter place in March.

Microscapha fanilis, sp. n.

Elliptica, convexa, pubescens, obscure brunnea, supra minutissime strigosa; antennis articulis primo et secundo robustis.

L. $1\frac{3}{4}$ mill.

This species is much broader than *M. japonica* and much darker in colour; the two basal joints of the antennæ are shorter and much stouter. The abdominal segments of the male in both species are very curious; there is a broad channel in the middle bordered by a carina: the channel equally occupies all the segments, but in *M. japonica* it is comparatively shallow.

The two basal joints of the antennæ in this genus are remarkable for their size and length.

Hab. Simabara and Nagasaki. Two examples.

Microscapha lata, sp. n.

Ovalis, convexa, pubescens, picco-brunnea, nitida; elytris apice perspicue deliscentibus; antennis pedibusque testaceis.

L. $2\frac{1}{4}$ mill.

This species is at once known from the two preceding by its larger size, greater breadth, and the gaping apices of the wing-cases, and also by the absence of a sternal sulcus in front of the posterior coxæ. The abdomen is only feebly

impressed where in *M. japonici* and *M. fœnalis* there is a conspicuous longitudinal channel, but my examples apparently are both females.

Hab. Kashiwagi. Two examples, 23rd June, 1881.

Synchroa crepuscula, sp. n. (Pl. VIII. fig. 1.)

Elongata, angustata, infusata, subopaca, pubescens; capite thoraceque minute et dense punctatis; elytris distincte striatis, interstitiis convexis; antennis pedibusque obscure rufo-brunneis.

L. 18 mill.

Elongate, narrow, dusky or blackish brown, somewhat opaque, with short greyish pubescence; the head finely and densely punctured; the thorax, sculptured like the head, narrowest anteriorly, feebly swollen in the middle, widest at the posterior angles, angles obtusely produced, depressions at the base wide and shallow; the elytra, very long and narrow, distinctly striate throughout, interstices convex and finely punctulate; the antennæ, palpi, and legs dull reddish brown. The third joints in all the tarsi are shorter than those of *S. melanotoïdes*.

This is the finest species of the genus known at present.

Hab. Sapporo and Junsai. Only five specimens.

Synchroa melanotoïdes, sp. n.

Elongata, elliptica, infusata, subnitida, pubescens; capite thoraceque parum dense punctatis; elytris striis leviter impressis; antennis pedibusque obscure brunneis.

L. 10-12½ mill.

Elongate, elliptical, dusky brown, somewhat shining, with somewhat long tawny pubescence; the head rather densely but not finely punctured; the thorax narrowest anteriorly and gradually widening to the base, posterior angles not produced, depressions at the base deep, somewhat triangular, and not widening out like those of *S. crepuscula*; the elytra, striæ feebly impressed, interstices punctured like the head and thorax; the antennæ and legs dull brown.

This species somewhat resembles *S. umbrina*, Mels.

Hab. Miyanoshita, Kurigahara, Sapporo, and Junsai. Many specimens.

Serropalpus niponicus, sp. n.

Elongatus, angustatus, brunneus, pubescens; capite thoraceque densissime rugoso-punctulatis; elytris distincte striatis, interstitiis dense rugoso-punctulatis; antennis pedibusque concoloribus.

L. 9 mill.

This species is similar in form and colour to *S. filiformis*,
18*

Mars., but the elytra are wholly and distinct striate like those of the European species *S. barbatus*, Schall. *S. niponicus* differs markedly, however, from the last-named in the elytral interstices being much more rugose and more convex.

Hab. Fukushima. One example, 28th July, 1881.

MIKADONIUS, gen. nov.

This genus should be placed close to *Serropalpus*; the most conspicuous differences consist in the prominent eyes, form of the thorax, and in the shortness of the third joint of the posterior tarsus. Body elongate, parallel laterally; head scarcely as wide as the anterior part of the thorax; eyes prominent, finely granulate; maxillary palpi, last joint cultriform and large, other joints triangular, enlarged on the inner edge; antennæ filiform, long, and slender, first joint stoutest, second much less robust and about half the length, third as long as the basal joint, 4, 6, 7 equal, fifth shorter than the fourth, 8-11 equal and rather longer than the seventh; thorax widest behind, narrowest in front; scutellum somewhat square; legs elongate; tibiæ with two strong and lengthy spurs at the tarsal end; tarsi, the fourth joints of anterior and intermediate pairs short and coequal with those of the third joints of the posterior pair.

Mikadonius gracilis, sp. n. (Pl. VIII. fig. 2, ♂.)

Elongatus, angustatus, griseo-pubescent, vix nitidus, capite thoraceque densissime punctatis; elytris in colore variabilibus; antennis pedibusque testaceis.

L. 7-12 mill. ♂, 9-13 mill. ♀.

Elongate, narrow, parallel at the sides, with grey or tawny pubescence; the head and thorax very closely punctured, the latter narrowest anteriorly, slightly swollen about the middle, widest behind; the elytral sculpture finer and less deep than that of the head and thorax. The sexes differ in colour. Male: mouth-organs, head (except a wide black band between the eyes), undersides of basal joints of the antennæ, legs, underside of the thorax, mesosternum, and first segment of abdomen (partly) testaceous; metasternum and apical joints of the abdomen blackish brown; elytra infusate on the margins, with a pale longitudinal vitta as shown in the figure. Female: mouth-organs, apical joints of antennæ somewhat vaguely, tibiæ, and tarsi testaceous; elytra with a short palish vitta in the middle of the wing-case, but close to the base, and a longer not well-defined second vitta, which commences near the humeral angle and continues down nearly to the apex,

other parts infusate. Some allowance must be made for variation, but my specimens are fairly constant in colour.

Hab. Miyanoshita, Chiuzenji, and Nishimura in June. Ten examples.

EURYZILORA, gen. nov.

The species of this genus is oblong and wide, resembling in outline a species of *Luciola*. Palpi robust, last joint cultriform; antennæ slender, joints 4-10 scarcely obconical, last joint elongate; head somewhat broad, eyes rather prominent; thorax transverse, arched laterally; scutellum rather wide, semi-circular behind; elytra parallel laterally, depressed, striate; legs and tarsi more robust and shorter, but similar to those of *Zilora*. The last joint of the palpus is long and parallel at the sides as compared with that of *Zilora* (agreeing more with *Phæotrya*), the genus to which it is in most respects similar.

Euryzilora lividipennis, sp. n. (Fig. 2.)

Oblonga, pieeo-brunnea, nigro-pubescent: thorace 4-foveolato; elytris striatis, lividis; antennis basi pedibusque rufo-brunneis.

L. 11-11½ mill.

Oblong, pitchy brown, with black pubescence obliquely erect; the head rather wide and uneven, irregularly and not closely punctured; the thorax, sometimes reddish in parts,

Fig. 2.



punctured like the head, median channel not well defined, basal fovea shallow, with a second in front of it, but nearer the middle of the disk, deeper; the elytra rugosely striate, interstices rather convex and obscurely punctate or rough, lateral margins narrowly dull reddish brown; the antennæ, three basal joints reddish, others more or less dusky; the legs wholly reddish brown.

Hab. Chiuzenji and Nikko. Three examples only.

Phlæotrya bellicosa, sp. n.

Elongata, parallela, infuscata, opaca; capite in medio impresso; elytris granulatis, obsolete tristriatis; antennis pedibusque obscure brunneis.

L. 20-21 mill.

Elongate, parallel, dusky brown, opaque; the head densely and evenly granulate, with a circular impression between the eyes; the thorax convex above, also densely but more coarsely granulate than the head, with small irregularly set nodules behind the neck and on the disk; the elytra densely granulate like the head, with three striæ more or less visible and wide apart; the antennæ and legs dull dusky brown.

I believe this is the largest species known.

Hab. Buno, Nishimura, Sapporo, and Junsai.

Phlæotrya rugicollis, Mars.

This species has more slender legs than *P. bellicosa* and relatively shorter tarsal joints; the third joint of the hind tarsus is especially noticeable in this respect.

L. $6\frac{1}{2}$ - $11\frac{1}{2}$ mill.

Hab. Maiyasan near Kobe, Kashiwagi, Sapporo, and Junsai.

Dircea flavitarsis, sp. n. (Pl. VIII. fig. 3.)

Elongata, parallela, fusco-brunnea; elytris bifasciatis; antennis articulo ultimo tarsisque flavis.

L. $11\frac{1}{2}$ -14 mill.

Elongate, parallel, dusky brown, somewhat opaque; the head densely sculptured, usually with a well-marked fovea between the eyes; the thorax margined laterally, fuscous, with a median yellowish pattern, which widens out transversely on the anterior and posterior margins; the scutellum yellow; the elytra finely and very densely granulate, with a reddish-yellow transverse band rather before the middle with dentate-sinuate edges, meeting at the suture, but not touching the outer edges, before the apex is a lobe-shaped yellow spot with its anterior edges only dentate; the antennæ dusky, with the terminal joints flavous; the thighs and tibiæ dusky brown, tarsi yellow.

Hab. Yuyama, Miyanoshita, and Nikko. Found commonly.

Dircea validicornis, sp. n.

Elongata, elliptica, nigra; thorace canaliculato; elytris 6-maculatis; antennis funiculi articulis sensim crassioribus.

L. 8 mill.

Elongate, elliptical, black, with a bluish tinge above, some-

what shining, with short pubescence; the head rather densely, not coarsely punctured, face nearly flat; the thorax densely sculptured and transversely rugose, median channel rather deep and a little shortened before neck; the scutellum semi-circular in outline; the elytra, finely and densely sculptured, with two lobe-shaped spots on the edge of the wing-case near the middle of the base, two median spots or bands on the space over the intermediate and posterior coxæ, these spots touch the outer margin and leave a wide area near the suture dark, and are emarginate in front and feebly sinuous behind, before the apex are two bands which nearly touch the suture and the outer edge, and have sinuous edges, all the spots orange-red; the antennæ, first and second joints cylindrical, third to the tenth gradually widen and flatten out, joints 8, 9, and 10 are markedly transverse, terminal joint conical in outline, all densely black; the legs black, claws palish.

Except the form of the antennæ, which may be a sexual character only, I can see nothing to separate this species from *Dircaea*.

Hab. Ikenchaya near Kashiwagi. One example only, June 22nd, 1881.

Dircaea erotyloides, sp. n.

Elongata, elliptica, brunneo-nigra, subnitida; elytris 4-maculatis, maculis flavo-rufis et dentato-sinuatis; antennis pedibusque nigris. L. $8\frac{1}{2}$ – $13\frac{1}{2}$ mill.

Elongate, elliptical, brownish black, somewhat shining; the head clearly punctulate, some points transversely confluent, not foveolate; the thorax longer than wide, widest before the base, densely punctured, transversely rugose, median channel narrow and reaching midway only from the base; the scutellum densely punctured, semicircular in outline; the elytra with four reddish-yellow maculations, each strongly dentate-sinuate and not touching the outer or sutural edges, sculptured like the thorax; the antennæ, legs, and under surface black.

This species resembles *D. 4-guttata*, Payk.

Hab. Nikko, Chiuzenji, and Buno.

Dircaea dentato-maculata, sp. n.

Elongata, parallela, nigra, opaca; elytris flavo-maculatis; antennis (basi excepta) nigris. L. 11– $12\frac{1}{2}$ mill.

Elongate, parallel, black, opaque; the head densely but finely sculptured, usually with a deep frontal fovea; the

thorax arched and narrowly explanate laterally, rugosely punctured, with irregular indentations; the scutellum black, nearly quadrate; the elytra finely and densely sculptured, with four yellow markings or blotches with dentate edges, the anterior ones leave the widest space at the suture, but they each reach equally near the outer margin; the antennæ, three basal joints yellow, the rest black; the palpi and legs black, claws and last joint of the tarsus palish. The abdominal segments are sometimes, although rarely, yellow.

Hab. Nikko and in the forests bordering the Kumagawa, a river which runs through the Province of Iligo.

Dircea obscura, sp. n.

Elongata, parallela, fusco-nigra, pubescens; antennis basi, palpis, ore tarsisque rufo-testaceis.

L. $6\frac{1}{2}$ –8 mill.

This species is somewhat similar to *D. femoralis* in colour, but the head is smaller, the thorax is longer than wide, the elytra less parallel, the thighs infuscate, and tibiæ more slender.

Hab. Nikko, Miyanoshita, and Kashiwagi. Eight examples.

Dircea parvula, sp. n.

Elongata, parallela, fusco-brunnea, pubescens; antennis basi, thorace antice pedibusque rufo-brunneis.

L. 5– $5\frac{1}{2}$ mill.

This species is extremely like the last, and might even be taken for a small variety of it, were it not for the antennæ being more slender. It differs in colour also, the mouth-organs, palpi, three basal joints of antennæ, anterior thoracic margin, and legs wholly are reddish brown.

Hab. Nikko, Otaru, and Junsai. Three examples.

Dircea femoralis, sp. n.

Elongata, parallela, fusco-nigra, pubescens; antennis basi et femoribus flavis.

L. 9– $9\frac{1}{2}$ mill.

Elongate, parallel, infuscate, somewhat opaque, with short greyish pubescence; the head densely granulate, with a linear impression before the neck; the thorax wider than long, rounded off anteriorly, punctate-granulate, punctures most conspicuous just behind the anterior margin, with a shallow median longitudinal channel, scutellar fovea well-marked; the elytra, striæ obsolete, finely granulate, and somewhat

rugose, the rugosities formed transversely; the antennæ, two basal joints yellow, others with the palpi dusky; the legs, tibiæ, and tarsi dusky, with the apices of the tibiæ sometimes yellow, thighs wholly clear yellow.

Hab. Yuyama and Kumamoto. Several specimens.

Abdera scriptipennis, sp. n.

Parum elliptica, fusco-brunnea, opaca; thorace rufo-marginato; elytris transversim fasciatis; antennis (basi excepta) nigris.

L. 3 mill.

Somewhat elliptical, dusky brown, opaque; the head densely and minutely sculptured; the thorax sculptured like the head, with a narrow margin of reddish brown, widest at the posterior angles; the elytra, apical half of the lateral margin narrowly reddish brown, sutural margin and a fascia over the posterior coxæ, shaped like the letter Z, of the same colour; the antennæ, two basal joints and apex of the terminal joint reddish; the legs dull brown, tarsi rather paler.

It is probable that the colour of this species is variable; it may be placed near *A. flexuosa*, Payk.

Hab. Junsai. One example.

Hypulus cingulatus, sp. n.

Elongatus, granulatus, parum opacus; capite thoraceque nigris; elytris basi late rufis; antennis pedibusque obscure rufo-brunneis.

L. 6-8 mill.

Elongate, surface granulate, subopaque, with tawny pubescence; the head sometimes with an impression between the eyes, black; the thorax also black, widest in the middle, posteriorly rectangular, disk convex; the elytra at the base and for about one third of their length dull red, over the hind coxæ there is an oblique band of golden-grey pubescence, and behind it a broad area black, well before the apex is a second golden-grey transverse band with the posterior edge sinuous, apex and area behind the second band black; the antennæ and legs obscure reddish brown.

Hab. Oyayama, Hakone, and Nikko. Chiefly taken from decaying beeches early in May.

Hypulus higonius, sp. n.

Elongatus, obscure rufo-brunneus, griseo-pubescent; capite inter oculos foveolato; thorace angulis posticis haud productis; elytris vage bifasciatis; antennis pedibusque obscure rufo-brunneis.

L. 7-7½ mill.

Elongate, dull reddish brown, nearly opaque, clothed with

griseous pubescence; the head slightly but widely impressed before the antennæ, distinctly foveolate between the eyes, neck infusate; the thorax granulate, rounded off anteriorly, hind angles nearly rectangular, on each side near the centre well in front of the scutellum is a dusky, nearly black, blotch not very well-defined in outline; the elytra with two dark vittæ behind the scutellum, each vitta touching the suture at its base, and two similarly coloured marks near the suture in the middle of the dorsal fascia, dorsal fascia infusate and on the area over the hind coxæ, in form dentate-sinuate, the apices also infusate; the antennæ, tibiæ, and tarsi dusky reddish brown, thighs darker. Beneath the meso- and metasterna are darker than the general colour of the body.

This species most nearly resembles *H. acutangulus*.

Hab. Oyayama in Higo, in May 1881.

Hypulus acutangulus, sp. n.

Elongatus, granulatus, subopacus, fusco-brunneus; fronte impressa; thorace angulis posticis acute productis; elytris fasciis dentato-sinatis, griseo-sericeis ornatis; antennis tarsisque obscure brunneis, femoribus et tibiis infuscatis.

L. 7-7½ mill.

Elongate, dull dusky brown, granulate, with greyish pubescence; the head somewhat widely impressed between the eyes; the thorax much longer than broad, with the hind angles acutely produced, variegated with greyish pubescence, in front of the scutellum is a median longitudinal shallow channel with two longer lateral ones on each side of it; the elytra are longer and narrower than those of *H. higonius* and darker in colour, the markings are very similar, but the dark band behind the posterior coxæ reaches further posteriorly as well as further in front, and the edges are conspicuously sinuate-dentate, apices infusate; the antennæ and legs infusate.

Hab. Oyama in Sagami and Chiuzenji. Six examples.

BOXZICUS, gen. nov.

The characters of this genus correspond in a great part with those of *Melandrya*. Maxillary palpi, second joint long and triangular, third triangular and short, terminal appears truncate if viewed one way and cultriform on the other; the antennæ after the sixth joint are widened and flattened out, terminal joint conical; the thorax bisinuous at the base and emarginate before the scutellum; the elytra without striæ and femora robust.

Bonzicus hypocrita, sp. n. (Pl. VIII. fig. 4.)

Elongatus, niger, subnitidus, parum pubescens; elytris punctatis, haud striatis, azureo-micans; antennis nigris, femoribus apice rufo-flavis.

L. 12-13 mill.

Elongate, black, with short greyish pubescence, somewhat shining, with an azure tint above in some lights, especially on the elytra; the head densely punctate; the thorax widest posteriorly, less thickly punctured than the head, bisinuate at base, emarginate before the scutellum, basal foveæ wide and somewhat deep; the scutellum somewhat rounded off behind, rather closely punctured; the elytra punctured like the thorax, without striæ; the antennæ densely black, with apical joint reddish or testaceous at the tip; the legs black, with the apices of the femora broadly, and the bases of the tibiæ narrowly, reddish yellow or clear yellow. In some examples there is a red patch, more or less diffused, on the elytra around the scutellum, and in such specimens the abdominal segments are margined with red.

During life this insect, running on timber, looks like a spotted *Buprestis*, the yellow colouring of the femora appearing to be lateral spots on the elytra.

Hab. Oyayama, Nikko, Chiuzenji, and Nishimura in June, and Junsai and Sapporo in August. Not rare where there are large decaying beeches.

IVANIA, gen. nov.

This genus is also proposed for a species which corresponds generally with those of *Melandrya*. Maxillary palpi short, and formed like certain species of *Melandrya*, e. g. *rufipes*, Gebl.; antennæ, two basal joints as in *Melandrya*, third flattened and triangular, fourth similar but rather larger, fifth again larger and similar to 6, 7, 8, and 9; tenth less triangular and scarcely as wide, terminal smaller and conical; head rather small, eyes a little prominent, thorax narrowest anteriorly, widest before the base, canaliculate in the middle; scutellum nearly quadrate; elytra 4-striate, striæ with wide interstices.

Ivania coccinea, sp. n. (Pl. VIII. fig. 5.)

Elongata, nigra; thoraco infuscato, parte obscure coccineo; elytris 4-striatis, interstitiis dense rugoso-punctatis, in totum coccineis; antennis pedibusque nigris.

L. 8-11 mill.

Elongate, black, with short scarlet pubescence; the head

somewhat densely punctured, foveolate between the eyes; the thorax blackish, more or less scarlet in parts, especially on the ridges, widely canaliculate in the middle, channel open at the base, closed anteriorly, at the sides from the base to about two-thirds of the thoracic length are excavations or deep depressions of irregular outline, pubescence more scattered than on the elytra; the scutellum black; the elytra bright scarlet, with pubescence of the same colour, 4-striate, striæ more or less conspicuous, interstices densely and rather rugosely punctured; the abdomen, antennæ and legs densely black.

Hab. Miyanoshita, Kiga, Chiuzenji, Kashiwagi and other places. This pretty species is by no means uncommon in the forests in June, flying in the sunshine.

Melandrya gloriosa, sp. n.

Elongata, rufo-testacea, pubescens; thorace margine extus et subtus rufo; elytris aureo-viridis, nitidissimis, apice rufis; antennis (basi excepta) pedibusque rufis.
L. $7\frac{1}{2}$ – $13\frac{1}{2}$ mill.

This species is very similar to, but quite distinct from, *M. rufipes*, Gebl. The head rather small, somewhat thickly punctured, black, with mouth-organs and palpi testaceous; the thorax black above, leaving the lateral margin broadly and the under surface wholly red; the elytra brilliant golden green, with the apex red, posterior area striate; the antennæ somewhat infuscate at the base, gradually becoming red-brown towards the terminal joints; the legs and abdominal segments reddish brown.

Hab. Miyanoshita, Hakone, Nikko, also at high elevations in Higo. Abundant at the time of appearance in June.

Melandrya mongolica, Solsky.

Melandrya mongolica, Sols. Hor. Ross. vii. p. 378 (1871); Lew. Ent. xxvi. p. 152; Mannerheim, Bull. Mosc. p. 105 (1853) (indescrip.).

“Nigra, nitida, subtiliter puberula, punctata, thorace anterieus angustato, basi utrinque sinuato, profunde, late excavato, medio plus minusve canaliculato, lateribus postice explanatis subreflexis; elytris nigris, subcyanis vel subvirescentibus, crebre profunde sulcatis, interstitiis sulcorum costulatis; ore cum palpis, antennis pedibusque nigro-piceis, plus minusve rufescentibus.

“L. 9–14 mill.”

Hab. “E. Siberia.” I found it also generally throughout Japan; on the main island and in Yezo.

Melandrya modesta, sp. n.

Elongata, nigra, parum nitida, griseo-pubescent; capite punctulato; thorace tenui et sparse punctulato; elytris nigris vix azureo-micans; antennis pedibusque rufo-brunneis.

L. 8 mill.

Elongate, black, somewhat shining, pubescent; the head punctulate, punctures not closely set; the thorax narrowest in front, widest before the posterior angles, less densely punctulate than the head, median channel feeble, basal foveæ rather wide; the scutellum not transverse, semicircular in outline; the elytra, striæ four in number, outer one shortest, all evanescent well before the base, black but opalescent in certain lights; the antennæ reddish brown, dusky at the base; the legs also reddish brown, with the intermediate and hind femora dusky.

This species somewhat resembles a small example of *M. mongolica*, Sols., but the elytral striæ are incomplete.

Hab. Oyama in Sagami. Two examples.

Melandrya niponica, sp. n.

Elongata, nigra, nitida, griseo-pubescent. *M. canaliculata* forma simillima, at multo major.

L. 14-19 mill.

Elongate, black, shining, with grey pubescence; the head irregularly and somewhat roughly punctured; the thorax rather widely canaliculate in the middle, with two wide depressions before the posterior angles, rather less thickly punctured than the head; the elytra striate, interstices rugosely punctulate; the mouth-organs, palpi, base of antennæ, legs, and the greater part of the under surface obscure reddish brown or piecons.

The large size and greater breadth of the thorax distinguish this from the European species.

Hab. Chiuzenji, and on Niohosan in June. Twenty specimens.

Melandrya atricolor, sp. n. (Pl. VIII. fig. 6.)

Elongata, parum angustata, atrata, nitida; elytris striis evanescentibus; palpis tarsisque brunneis.

L. 9½-12 mill.

Elongate, black, shining, somewhat narrow and parallel at the sides; palpi, apical joint of antennæ, and tarsi brown; the head irregularly and not densely nor deeply punctured; the thorax widest before the base, narrowest anteriorly, less distinctly punctured than the head, median channel shallow;

the elytra vaguely brownish at the base, striæ distinctly traceable only in certain lights, sculpture similar to that of the thorax.

Hab. Chiuzenji. Six examples in June 1880, only seen once.

Melandrya ordinaria, sp. n.

Elongata, nigra, subnitida, pubescens; capite thoraceque parum dense punctatis; elytris hand striatis, lateralibus obscure rufobrunneis.

L. $8\frac{1}{2}$ – $9\frac{1}{2}$ mill.

Elongate, black, somewhat shining, pubescent; the head distinctly rather closely punctured, impressed between the eyes; the thorax punctured like the head, widest behind the middle, median channel well-defined, shortened only just behind the neck, basal foveæ very small, situated in a wide depression; the scutellum black; the elytra punctured like the thorax, striæ obsolete (traces are seen in one example), with a rather broad lateral band reddish brown; the antennæ black, apex of terminal joint reddish; the legs blackish, tarsi obscurely reddish brown. The elytra are wholly reddish brown in one example.

Hab. Oyayama, Kashiwagi, Mayebara, and Chiuzenji. Nine examples.

Melandrya ruficollis, sp. n. (Pl. VIII. fig. 7.)

Elongata, depressa, parallela, atrata, subnitida; thorace, abdomen apice, rufis; antennis brevibus.

L. 12–17 mill.

Elongate, depressed, parallel, somewhat shining, with short pubescence; the head, surface uneven and irregularly punctured, punctures rather small; the thorax one third wider than broad, rounded at the sides, sinuous at the base, clearly punctured, orange-red, with pubescence of same colour; the scutellum black, rather densely and finely punctured; the elytra, parallel at sides, sculpture close, black, with black pubescence; the abdomen, last segment orange-red; the antennæ, palpi and legs black, the first short, about the length of the head and thorax, with joints 7 to 10 obconical.

Owing to the breadth of the thorax and shortness of the antennæ, the facies of this species at first sight may seem to exclude it from the genus *Melandrya*.

Hab. Ichiuchi, Yuyama (Ichibosa yama) and at Nikko near the temples. Only six specimens.

Melandrya pictipennis, sp. n. (Pl. VIII. fig. 8.)

Elongata, nigra, nitida, pubescens; capite dense punctato; elytris flavo-maculatis, laud striatis.

L. $6\frac{1}{2}$ –7 mill.

Elongate, black, pubescent, shining; the head densely and clearly punctured, sometimes with a fovea between the eyes; the thorax rather less thickly punctured, widest before the base, narrowest anteriorly, basal foveæ wide and shallow, median channel moderately deep; the elytra, without striae, black, with a wide flavous band over the metasternum, which leaves the outer and sutural edges black, well behind the middle is a second band, which touches the outer edge (but not the sutural) and along the edge it continues on narrowly almost to the apex. A second specimen has the elytral markings different; the base is narrowly pale, the median band is reduced to an elongate lateral spot and the apical dark area has a median flavous region along the suture; the antennæ black, with the apex of the last joint, and three or four others at the base, reddish; the legs also reddish, with infusate joints.

The example figured is perhaps the most constant colour-form of this variable species. I do not see any reason for not including the species in *Melandrya*, but it may be allied to species placed by Leconte and Horn in *Prothalia*.

Hab. Nikko, Chiuzenji, and Nishimura. I found only four examples.

Penthe japana, Mars.

This species is like *P. obliquata*, in having the scutellum covered with orange-coloured hair. The apical joint of the antennæ is also of the same colour.

Hab. Common in a white arboreal fungus throughout all the islands.

Scotodes niponicus, sp. n.

This species resembles *S. annulatus*, Eschsch., in colour and facies generally, but it is more robust; the sculpture of the elytra is coarser and the tarsi are shorter. The shortness of the tarsus is most conspicuous in the basal joint of the hind foot.

L. $9\frac{1}{2}$ mill.

Marseul did not notice these differences, and assigned it to the European species. I do not know *S. uniformis*, Motsch.

Hab. Miyanoshita, in May. Four or five examples only.

Nothus (Osphya) orientalis, sp. n.

Elongatus, niger, opacus, pubescens; capite thoraceque punctulatis, griseo-vestitis; elytris late bifasciatis; antennis (basi excepta) nigris vel infuscatis.

L. 6-6½ mill.

Elongate, black, opaque, pubescent; the head with a short and close greyish pubescence, rather closely punctulate; the thorax punctulate and clothed like the head, arched at the sides, very feebly sinuous before the scutellum; the scutellum densely clothed with an ashen pile; the elytra, punctulate, with a very narrow ashen-grey margin along the suture and a broad ashen fascia across the wing-case over the intermediate coxæ and a second, rather narrower, well before the apex; the antennæ, long and slender, three basal joints flavous, 4-7 black, 8-11 infuscate; the legs black, with bases of the tibiæ pale.

Hab. Miyanoshita and Nikko. Ten examples.

OTHNIUS, Leconte, 1861.

Elacatis, Pascoe, 1860.

There are only two species of this genus known from Japan—*O. Kraatzi*, Reit., Deutsche ent. Zeitschr. 1879, p. 226, and *O. ocularis*, Lew., Ent. M. M. ser. 2, vol. ii. 1891, p. 247. This genus is introduced here in the serial position assigned to it by Leconte and Horn in the 'Classification of the Coleoptera of North America,' 1883, p. 391. Pascoe's name was preoccupied. *O. Kraatzi* is common in all the inland forests of Japan, but *O. ocularis* is a tropical form, found as yet only in the region of the Kumagawa in Higo. The habits of the species are noticed, Ent. M. M. 1891, p. 248.

Eutrapela robusticeps, sp. n.

Elongata, æneo-nigra, nitida, hirsuta; capite thoraceque vix grosse punctatis; elytris striatis, interstitiis transversim rugosis; antennis pedibusque nigris.

L. 10 mill.

Brassy black above, the antennæ and legs black, clothed with longish hair, but not so long as that of *E. elongata*; the head rather broad and punctured, punctures large, but not dense; the thorax, anterior margin not raised, about as broad as long, punctured like the head; the elytra punctate-striate, interstices transversely rugose.

In form this species agrees fairly well with *E. elongata*, F.;

the thorax is rounded off anteriorly, the body is similarly hirsute, and the last joint but one of the antennæ is short, like that of the Fabrician species.

Hab. Sapporo. Two examples.

Arthromacra viridissima, sp. n.

Elongata, viridissima, nitida, punctata; antennis pedibusque flavis vel obscure flavis.

L. 9-12 mill.

Elongate, bright metallic green, densely punctate above; the head, eyes rather small and rather prominent, with a semi-circular raised process over the point of the antennal insertion, coarsely and densely punctured, surface somewhat uneven; the thorax punctured like the head, cylindrical, truncate before and behind; the elytra nearly as wide again as the thorax, punctate, with the punctures inclined to be transversely confluent, apices obtusely acuminate; the antennæ, terminal joint as long as the eighth, ninth, and tenth together, testaceous, with terminal and ninth and tenth joints sometimes infuscate, basal joint also sometimes dusky on the upper surface; the legs testaceous, with apical portion of the femur broadly green, and the base of the first tarsal joint narrowly dusky, claws and apical parts of all the tarsi also dusky. Very rarely the legs are wholly pale yellow. The last joint of the palpus is infuscate.

In *Arthromacra wenea*, Say, the elytral striae are obscurely traceable; in the Japanese species there are no indications of striae.

Hab. Miyanoshita, Oyama, Tokio, Nikko, and Hitoyoshi. This pretty species is common in certain places in May, occurring in the flowers of *Deutzia* and *Cerasus*.

Arthromacra sumptuosa, sp. n.

Elongata, purpureo-cuprea, nitida; antennis pedibusque obscuro nigris.

L. $9\frac{1}{2}$ - $10\frac{1}{2}$ mill.

This species closely resembles *A. viridissima* in sculpture, but the colour is wholly different. In structure it differs in having shorter and more robust antennæ, joints 7-10 being somewhat obconical, not elongate; the thorax is shorter and less cylindrical, with the outline nearly quadrate when viewed from above and the elytra are less acuminate at the apices; the legs and antennæ wholly and obscurely black.

Hab. Chiuzenji. Apparently scarce and local. Six examples.

Arthromacra higonie, sp. n.

Elongata, aureo-cuprea, nitida; thorace clare punctato; antennis pedibusque obscure brunneis vel infuscatis.

L. 9-9½ mill.

Elongate, golden coppery; the head coarsely punctured, with a median fovea between the eyes; the thorax very clearly punctate, cylindrical, with the anterior and basal rim markedly raised; the elytra are sculptured like those of *A. viridissima*; the antennæ and legs obscurely black, with the intermediate and hind tarsi less dark. The antennæ in this species are formed somewhat like those of *A. sumptuosa*, but they are more slender and joints 8, 7, 6 less obconical.

This species is separated from the others of this series at once by the clear punctuation of the thorax, the punctures are clearly separated one from another. In form it is intermediate between *A. sumptuosa* and *decora*.

Hab. Yuyama in Higo, May 8th, 1881.

Arthromacra decorata.

Lagria decorata, Mars. Ann. Soc. Ent. Fr. 1876, p. 339.

Marseul placed this insect in the genus *Lagria*; it is of a greenish-brassy tint, with the antennæ (apex excepted), tibiæ, tarsi and base of the femora testaceous. The joints of the antennæ are formed like those of *A. higonie*, but they are shorter and less slender.

Hab. Kobé, near the base of Maiyasan. Apparently very local. I took one specimen in 1871 and on returning to the place on the 11th June, 1881, I found seven others.

[To be continued.]

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

January 9, 1895.—Dr. Henry Woodward, F.R.S.,
President, in the Chair.

The following communication was read:—

‘The Formation of Oolite.’ By E. B. Wethered, Esq., F.G.S.

In previous communications the Author has described pisolites formed by the growth of *Girvanella*, and some true oolitic granules having a like origin. He has long entertained the opinion that all oolitic granules are of organic origin, but has not, up till now, been in a position to prove this.

He describes the form of the granules, which frequently exhibit a series of concentric layers of calcium carbonate around a nucleus, and also dark striæ and patches, the former placed more or less at